

P
3. (Amended) The polynucleotide according to claim 2 wherein said primer has the nucleotide sequence of SEQ ID No. 22.

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5. (Three Times Amended) The polynucleotide according to claim 1 encoding a protein, which polynucleotide hybridizes with a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 21 or all of the nucleotide sequence encoding any of the amino acid sequences of SEQ ID No. 1 to 6 under the condition of 5 x SSC and 50°C, and which protein transfers an aromatic acyl group to flavonoid.

6. (Three Times Amended) The polynucleotide according to claim 1 encoding a protein, which polynucleotide hybridizes with a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 21 or all of the nucleotide sequence encoding any of the amino acid sequences of SEQ ID No. 1 to 6 under the condition of 2 x SSC and 50°C and which protein transfers an aromatic acyl group to flavonoid.

7. (Four Times Amended) The polynucleotide according to claim 1 encoding a protein which consists of an amino acid sequence which is at least 30% homologous to any one of the amino acid sequences of SEQ ID No. 1 to 6, and which transfers an aromatic acyl group to flavonoid.

8. (Three Times Amended) The polynucleotide according to claim 1 encoding a protein which has an amino acid sequence having a homology of at least 69% with any of

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the amino acid sequences of SEQ ID No. 1 to 6, and which transfers an aromatic acyl group to flavonoid.

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9. (Amended) A vector comprising a polynucleotide according to claim 1.

10. (Amended) A host cell transformed with a vector according to claim 9.

11. (Amended) A host cell according to claim 10 wherein said host is a microbial or animal cell.

12. (Amended) A host cell according to claim 10 wherein said host is a plant cell or a plant body.

TJ
20. (Amended) A method for acylating a pigment in a plant, comprising introducing a polynucleotide according to claim 1 into the plant, whereby said polynucleotide expresses a protein, and said protein acylates the pigment in the plant.

TJ
22. (Amended) A method for stabilizing a pigment in a plant, comprising introducing the polynucleotide according to claim 1 into a plant, whereby said polynucleotide expresses a protein, and said protein acylates the pigment in the plant, which acylation stabilizes said pigment in the plant.

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23. (Amended) A method for altering the color of flowers, comprising introducing the polynucleotide according to claim 1 into a plant, whereby said polynucleotide expresses a protein, and said protein acylates the pigment in the plant, which acylation alters the color of flowers of said plant.

I-8

25. (Amended) A plant, a progeny or tissues thereof, each of whose color has been altered by introducing thereinto a polynucleotide according to claim 1.

I-9

28. (Four Times Amended) An isolated polynucleotide encoding an anthocyanin acyltransferase, which polynucleotide encodes an amino acid sequence selected from the group consisting of the amino acid sequences as set forth in SEQ ID No. 1 to 6, or hybridizes with a nucleotide sequence complementary to a nucleotide sequence selected from the group consisting of the nucleotide sequences encoding the amino acid sequences as set forth in SEQ ID No. 1 to 6 under the condition of 5 x SSC and 50°C or the condition of 2 x SSC and 50°C, and which anthocyanin acyltransferase transfers an aromatic acyl group to flavonoid.

I-10

29. (Amended) A vector comprising a polynucleotide according to claim 28.

30. (Amended) A host cell transformed with a vector according to claim 29.

31. (Amended) A host cell according to claim 30 wherein said host is a microbial or animal cell.

32. (Amended) A host cell according to claim 30 wherein said host is a plant cell or a plant body.

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33. (Amended) A method for acylating a pigment in a plant, comprising introducing a polynucleotide according to claim 28 into the plant, whereby said polynucleotide expresses a protein, and said protein acylates the pigment in the plant.

34. (Amended) A method for stabilizing a pigment in a plant, comprising introducing the polynucleotide according to claim 28 into a plant, whereby said polynucleotide expresses a protein, and said protein acylates the pigment in the plant, which acylation stabilizes said pigment in the plant.

35. (Amended) A method for altering the color of flowers, comprising introducing the polynucleotide according to claim 28 into a plant, whereby said polynucleotide expresses a protein, and said protein acylates the pigment in the plant, which alters the color of flowers of said plant.

36. (Amended) A plant, a progeny or tissues thereof, each of whose color has been altered by introducing thereinto a polynucleotide according to claim 28.

46. (Twice Amended) The polynucleotide according to claim 1, wherein the anthocyanin acyltransferase transfers an aromatic acyl group to the glucose of the 3 or 5 position of anthocyanin.

47. (Twice Amended) The polynucleotide according to claim 2, wherein the polynucleotide encodes an anthocyanin acyltransferase which transfers an aromatic acyl group to the glucose at the 3 or 5 position of anthocyanin.

48. (Twice Amended) The polynucleotide according to claim 5, wherein the anthocyanin acyltransferase transfers an aromatic acyl group to the glucose at the 3 or 5 position of anthocyanin.

49. (Twice Amended) The polynucleotide according to claim 7, wherein the anthocyanin acyltransferase transfers an aromatic acyl group to the glucose at the 3 or 5 position of anthocyanin.

50. (Twice Amended) The polynucleotide according to claim 8, wherein the anthocyanin acyltransferase transfers an aromatic acyl group to the glucose at the 3 or 5 position of anthocyanin.

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51. (Twice Amended) The polynucleotide according to claim 28, wherein the anthocyanin acyltransferase transfers an aromatic acyl group to the glucose at the 3 or 5 position of anthocyanin.

52. (Twice Amended) The polynucleotide according to claim 42, wherein the polynucleotide encodes an anthocyanin acyltransferase which transfers an aromatic acyl group to the glucose at the 3 or 5 position of anthocyanin.

T(2)

53. (Twice Amended) An isolated acyltransferase polynucleotide which encodes an anthocyanin acyltransferase.

T(3)

Please add new claims 54-67 as follows.

--54. (New) An isolated polynucleotide encoding an anthocyanin acyltransferase, which gene encodes an amino acid sequence selected from the group consisting of the amino acid sequences as set forth in SEQ ID No. 1 to 6.

55. (New) A vector comprising a polynucleotide according to claim 53.

56. (New) A host transformed with a vector according to claim 55.

57. (New) A host according to claim 56, wherein said host is a microbial or animal cell.

58. (New) A host according to claim 56, wherein said host is a plant cell or a plant body.

59. (New) A method for acylating a pigment in a plant, comprising introducing the polynucleotide according to claim 54 into a plant, whereby said gene expresses a protein, and said protein acylates the pigment in the plant, which alters the color of flowers of said plant.

60. (New) A method for stabilizing a pigment in a plant, comprising introducing the polynucleotide according to claim 54 into a plant, whereby said gene expresses a protein, and said protein acylates the pigment in the plant, which stabilizes the pigment of said plant

61. (New) A method for altering the color of flowers, comprising introducing the polynucleotide according to claim 54 into a plant, whereby said gene expresses a protein, and said protein acylates the pigment in the plant, which alters the color of flowers of said plant

62. (New) A plant whose color has been controlled by introducing thereinto a polynucleotide according to claim 54, or its progeny having the same property, or tissues thereof.

63. (New) The plant tissue according to claim 62, wherein said tissue is a flower.

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64. (New) A cut flower of the plant according to claim 62 or its progeny having the same property.

65. (New) The method according to claim 60, wherein the pigment is anthocyanin.

67. (New) The method according to claim 61, wherein the pigment is anthocyanin.--
